

REMARKS

This paper is responsive to any paper(s) indicated above, and is responsive in any other manner indicated below.

DRAWING OBJECTIONS / DRAWING CHANGES

Submitted herewith is an attached FIG. 14 drawing sheet (labeled "Replacement Sheet" within the margin header, as required) incorporating changes as indicated within the "AMENDMENTS TO THE DRAWINGS" section of this paper. Acknowledgment of receipt, and approval, of the drawing changes and Replacement Sheets, are respectfully requested.

PENDING CLAIMS

Claims 1-32 were pending, under consideration and subjected to examination in the Office Action. Appropriate claims have been amended, canceled and/or added (without prejudice or disclaimer) in order to adjust a clarity of Applicant's claimed invention, and/or to rewrite allowable ones of Applicant's claims into independent form. At entry of this paper, Claims 1-32 will remain pending for further consideration and examination in the application.

REWRITTEN ALLOWABLE CLAIMS

Claims 4-8, 17-24 and 31-32 have been indicated as being allowable if rewritten, as indicated within the section numbered "6" on page 8 of the Office Action, and at least appropriate base ones of such claims have been so rewritten. Further, ones of such claims have been minorly amended (e.g., to improve clarity,

correct antecedents, remove extraneous portions) within this paper in a manner believed not to affect an allowability thereof. Reconsideration and renewal of the allowance are respectfully requested. Applicant and the undersigned respectfully thank the Examiner for such indication of allowable subject matter.

ALL REJECTIONS UNDER 35 USC '102 AND '103 - TRAVERSED

All 35 USC rejections are respectfully traversed. All descriptions of Applicant's disclosed and claimed invention, and all descriptions and rebuttal arguments regarding the applied prior art, as previously submitted by Applicant in any form, are repeated and incorporated hereat by reference. Further, all Office Action statements regarding the prior art rejections are respectfully traversed. As additional arguments, Applicant respectfully submits the following.

In order to properly support a '102 anticipatory-type rejection, any applied art reference must disclose each and every limitation of any rejected claim. The applied art does not adequately support a '102 anticipatory-type rejection because, at minimum, such applied art does not disclose (or suggest) the following discussed limitations of Applicant's claims.

Applicant's disclosed and claimed invention is directed toward arrangements (e.g., apparatus) which can reduce an area of a non-display region relative to a display image, for displaying a high-definition multi-tone image. In order to accomplish the same, Applicant's disclosed and claimed invention has switch means which a plurality of switch means which are connected to receive both switch drive signals and trigger signals, and to select one of the gradation voltage lines responsive to application of both the switch drive signals and trigger signals to the switch means. Such connection to receive both the switch drive signals and trigger

signals was in Applicant's original claims, albeit not clearly recited. In contrast, the primary Shiraki et al. reference teaches a wholly differently arranged switching arrangement, and specifically, Shiraki et al. does not teach/suggest that its switches ASW1, ASW2, etc., are connected to receive trigger signals.

None of the other applied references (whether alone, or in any combination) cure the deficiency mentioned above with respect to the primary Shiraki et al. reference.

In any event, Applicant's independent claims have been clarified to even more explicitly recite that Applicant's plurality of switch means which are connected to receive both switch drive signals and trigger signals, and to select one of the gradation voltage lines responsive to application of both the switch drive signals and trigger signals to the switch means. For example, independent claim 1 recites, "a plurality of switch means, coupled to receive said switch drive signals and said trigger signals, for selecting a specified gradation voltage line in response to said switch drive signals under condition in which said trigger signals are inputted to said switch means, to supply a gradation voltage from said specified gradation voltage line to a specified signal line."

In addition to the foregoing, the following additional remarks from Applicant's foreign representative are also submitted in support of traversal of the rejection and patentability of Applicant's claims.

In the following, the reason why claim 1 of this invention of which switch means and related surrounding structure connected thereto, is different from the circuit disclosed in Shiraki et al. (US! 6,504,522 32) is explained. The following only counter argues since all the other rejected claims are dependent from claim 1.

The last paragraph in original claim 1 disclosed “a plurality of switch means for selecting a specified gradation voltage line in response to said switch drive signals under condition in which said trigger signals are inputted, to supply a gradation voltage from said specified gradation voltage line to a specified signal line.” Accordingly, three characteristics are disclosed/concerned with Applicant’s “a (plurality of) switch means”, i.e.:

- (a). Selecting a specified gradation voltage line in response to said switch drive signals,
- (b). Under condition in which said trigger signals are inputted, and
- (c). To supply a gradation voltage from said specified gradation voltage line to a specified signal line.

The above items (a), (b) describes a connecting relation between “switch means” and “decoder means”, and “switch means” and “trigger signal output means”. That is, because claim 1 discloses “said switch drive signals” is generated by the “decoder means”, and “said trigger signals” is generated by the “trigger signal output means”.

While, switch 14a-14h in Shiraki (USP 6,504,522 B2; FIGS. 1, 14a-14h, SL, Col. 8, lines 30-39) discloses to connect decoder circuit 13 corresponding “decoder means”, and includes function for selecting one of voltage on V1-V8 in response to signal generated by decoder circuit 13 to output to signal line SL. However, switches 14a-14h are not connected to a circuit corresponding to “trigger signal output means”, and does not include a function for receiving “trigger signals” generated by the “trigger signal output means”. That is why, Shiraki et al.’s switches are labeled as “ANALOG SWITCH”, i.e., Shiraki et al.’s switches 14a-14h are a general analog switch, which are different from “switch means” disclosed in

Applicant's specification. A general analog switch is a switch by which between two nodes are connected/disconnected by a single control signal.

A practical structure of "switch means" and connecting relation between "decoder means" and "switch means" defined in claim 1 are disclosed in FIG.1, and page 17, line 9 - page 18, line 6. The "switch circuit SW" which is "switch means" is connected to two wirings of "trigger line Q1" and "switch drive line D1-1", and receives two control signals of the switch drive signal and trigger signal. The "switch drive signal" and "trigger signal" are each generated by decoder 3 (which is a "decoder means") and shift register 2 (which is "trigger signal output means"), respectively. Thus, Applicant's switch circuit SW is controlled by the two control signals of switch drive signal and trigger signal, and operation for selecting gradation voltage is disclosed in PIG.14, and page 25, line 6 - page 26, line 1.

Accordingly, the analog switch in Shiraki (which is controlled by a single control signal) is completely different from "switch means" which receives two control signals disclosed in claim 1 of this invention. And, claim 1 of this invention discloses a novel structure configured by connecting a structure among the "switch means" and "decoder means", "trigger signal output means", "gradation voltage line".

As mentioned in above, Applicant respectfully submits that claim 1 is novel and non-obvious over the cited references.

As a result of all of the foregoing, it is respectfully submitted that the applied art would not support a '102 anticipatory-type rejection or '103 obviousness-type rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of such '102 and '103 rejections, and express written allowance of all of the rejected claims, are respectfully requested.

EXAMINER INVITED TO TELEPHONE

The Examiner is herein invited to telephone the undersigned attorneys at the local Washington, D.C. area telephone number of 703/312-6600 for discussing any Examiner's Amendments or other suggested actions for accelerating prosecution and moving the present application to allowance.

RESERVATION OF RIGHTS

It is respectfully submitted that any and all claim amendments and/or cancellations submitted within this paper and throughout prosecution of the present application are without prejudice or disclaimer. That is, any above statements, or any present amendment or cancellation of claims (all made without prejudice or disclaimer), should not be taken as an indication or admission that any objection/rejection was valid, or as a disclaimer of any scope or subject matter. Applicant respectfully reserves all rights to file subsequent related application(s) (including reissue applications) directed to any/all previously claimed limitations/features which have been subsequently amended or cancelled, or to any/all limitations/features not yet claimed, i.e., Applicant continues (indefinitely) to maintain no intention or desire to dedicate or surrender any limitations/features of subject matter of the present application to the public.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in the application are now in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

To the extent necessary, Applicant petitions for an extension of time under 37 CFR '1.136. Authorization is herein given to charge any shortage in the fees, including extension of time fees and excess claim fees, to Deposit Account No. 01-2135 (Case No. 500.40528X00) and please credit any excess fees to such deposit account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP



Paul J. Skwierawski
Registration No. 32,173

1300 North Seventeenth Street
Suite 1800
Arlington, VA 22209
Tel.: 703-312-6600
Fax.: 703-312-6666

PJS/slk

Amendments to the Drawings:

The attached drawing sheets (each labeled “Replacement Sheet” within the margin header, as required) incorporate the following changes.

FIG. 14's erroneous reference numerals “G1, G2, G3” have been corrected to “Q1, Q2, Q3”.

Attachment: Replacement Sheet
Annotated Sheet Showing Changes



Appl. No. 09/932,113
 Amdt. Dated July 14, 2005
 Reply to Office action of March 14, 2005
 Annotated Sheet Showing Changes

FIG.14

